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ABSTRACT

Research was conducted to examine the language acquisition of a Mexican-American child who has been brought up in a linguistic environment where code-switching between Spanish and English is the dominant style of speaking. In addition, the relation of code- switching to the acquisition of bilingualism is analyzed. The speech of the subject, a two-year-old boy in a middle class bilingual family, was recorded and analyzed for nine months. Observations concerning the child's speech habits and linguistic repertoire were also considered in the analysis. Documentation is provided on the structure and rules of code-switching. It is concluded that code-switching appears not to be detrimental to the development of bilingualism, but, on the contrary, seems to be one approach to the simultaneous acquisition and maintenance of two languages. (AMH)

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The Acquisition of Bilingualism: A Code-Switching Approach

by

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RELEVANCE TO EDUCATIONAL PRACTICE

Huerta's paper is an analysis of the acquisition of code-switching, one of the linguistic varieties or styles in use among Chicanos in the Southwest. Her point, shared by other scholars in this area, is that code-switching is not a random mixing of two languages (English and Spanish), but rather a structured and acceptable form of speaking. This careful analysis of a young child's stages of development in the acquisition of code-switching is an important contribution to our understanding of the processes of language learning. Huerta provides further documentation of the structure and rules of code-switching, information that educators need to be aware of so that they can recognize code-switching as one of the acceptable ways of speaking in Chicano communities.

THE ACQUISITION OF BILINGUALISM: A CODE-SWITCHING APPROACH

Ana Huerta

INTRODUCTION

The primary purpose of this paper is to explore a field about which very little has been written in the past; i.e., the language acquisition of a Mexican-American child who has been brought up in a linguistic environment where code-switching between Spanish and English is the dominant style of speaking. Secondly, it is to discuss code-switching with relation to the native acquisition of two languages; i.e., the acquisition of bilingualism.[1]

There are very few studies which have dealt with the language acquisition of bilingual children. One of the earliest and most often cited ones is Leopold's (1939-49) diary of the acquisition of English and German by his daughter Hildegard. Another study done by Burling (1959) deals with the acquisition of Garo and English.

Investigations dealing with the acquisition of Spanish and English are sparse, even in the United States where Spanish-English speakers constitute a large percentage of the population.[2] Fantini's (1974) case study of his bilingual child and Padilla and Liebman's (1975) study are two such investigations.

Little attention, however, is paid to the code-switching linguistic behavior among the subjects in these and other studies; yet the literature on this topic shows that this style of speaking is present in every bilingual's speech to a certain extent, not only among adults but children (v. McClure and Wentz, 1975; 1976; McClure 1977) and infants as well, as will be seen below, and is seen in the Padilla and Liebman study mentioned above. An analysis of this type of bilingual discourse with relation to the acquisition of bilingualism is thus long overdue.

The subject of this investigation is a male who at the outset of the study aged two years, one month, zero weeks (2:1:0), which is also the time when his linguistic abilities seem to be in a transition from the one word to the two word stage,and his language development seems to have taken on a much faster rate than was previously the case.[3]

Christopher is a native of El Paso, Texas, born to middle class bilingual parents who are both also from the same area, his mother being from El Paso and his father from nearby Ysleta, Texas. Having been reared at home, in El Paso, Christopher has been exposed to both English and Spanish from birth. These two languages, however, are used to a great extent in an alternating (code-switching) fashion among members of his family, including not only his parents, but maternal grandparents, uncles and aunts as well. He is exposed to all English speech only when he visits his monolingual English speaking cousins and to all Spanish speech when he is with his paternal grandparents, neither opportunity being a frequent one (i.e., not more than once a week for approximately two hours) and thus not being an important influence on his speech patterns.

Of major concern in this paper, therefore, will be Christopher's development of language in this type of speech milieu, and the resulting implications for code-switching as regards the acquisition of bilingualism.

PROCEDURE

The procedure undertaken for this study consisted of recording Christopher's speech at varying intervals from the age of 2:1:0 to 2:10:0. A total of approximately four hours of discourse was recorded and transcribed during these nine months at the following time periods: 2:1:0, 2:1:1, 2:4:0, 2:5:0, 2:6:2, 2:7:0, 2:9:3 and 2:10:0; accompanying notes also being made on

the speech contexts during these recordings. This corpus of speech was divided into three stages (with an approximately equal amount of data in each) at three-month intervals. The first stage thus takes into account all speech produced from 2:1:0 to 2:4:0, the second from 2:4:0 to 2:7:0, and the third from 2:7:0 to 2:10:0. The description of the subject's utterances below is thus presented according to this breakdown of the speech data.

No attempt was made to make a phonological transcription of the child's speech, as an analysis of his speech sounds is beyond the scope of this paper and as such will only be dealt with generally; insofar as it relates to the main theme presented herein; i.e., the relation of code-switching to native acquisition of bilingualism.

Most of the sessions took place either in the subject's home or his maternal grandparents' home, and all of them involved either his parents and/or his maternal grandparents', the writer of this paper, or occasionally one of his uncles as the adult(s) in the conversation. There was thus no motive for inhibition on the subject's part, as he is very well acquainted with these people, and so all dialogs recorded were natural, informal, and spontaneous.

This investigation, furthermore, is based also on observations made by the writer and the subject's mother during the same time period regarding Christopher's speech habits and linguistic repertoire. The entire speech setting, as well as the form of the utterances under investigation and any personal knowledge about the subject were all, therefore, taken into account in the analysis which follows.

STAGE I

At the beginning of the study Christopher appeared to be at a stage in his speech where he was moving from one-word utterances to two and three-word utterances, commonly referred to as telegraphic speech. Such was the case in his English, his Spanish and his mixed, or code-switched[4], language utterances.

1) coffee	(asking for coffee)
2) fish	(pointing to aquarium, wants to feed fish)
3) me up	(asking grandmother to pick him up)
4) come on	(grabbing grandmother by the hand)
5) ook mama	("look mama"; pointint at crayons)
6) me off bib	(when finished eating breakfast)
7) pato!	(looking at picture of duck in a book)
8) más	(asking for more cream)
9) Ana a tá	("Ana ahí está"; pointing to A)

Most of his two-, three-word, or occasionally longer utterances take on the following type of mixed language pattern, however,

10) me ver	(trying to see what is inside the washer)
11) me colar	("me collar"; pointing to necklace on him, here interpreted as "I have a necklace" or "this necklace is mine".)
12) ¿eto creme?	(pointing to bottle of lotion)
13) me cayo	("me caigo"; while sitting on top of washer)
14) me ten	("me tren"; uttered on different occasions: pointing to the train, "I have a train" or "that train is mine"; pulling it, "I'm playing with it"; and later with a loud yell, "my train is stuck" as the string got caught in the wheels.)
15) ¿ota boot?	(pointing to one of two boots; "otra")
16) oto piece	(asking for another piece of candy)
17) oto balloon	(asking for another balloon)
18) me ota cookie	(asking for another cookie)
19) tá me vaso	("está me vaso"; pointing to his cup as adult is about to give him some coke)

Observation of the above shows that Christopher has picked up two pivot-type words,[5] one in either language, which he uses indiscriminately with either

an English or Spanish complement. Ota, oto (otra, otro) are used to mean "the other" or "another", while "me" is used as a subject pronoun, "I" (v. 10, 13, 18) or a possessive pronominal, "mine" (v. 11, 14).

At this point most of Christopher's vocabulary is available to him in only one or the other language so that his bilingualism is complementary to a great extent. His mixed language utterances, therefore, are unlike those of the adult bilingual, where the use of English and/or Spanish os often only stylistic and carries certain social implications.[6]

There are a few instances in this first stage, however, where the subject does manifest through his speech that he has available to him two different forms for naming a single object or action. He furthermore knows that they can be used interchangeably:

20) At breakfast table; CH denoting Christopher, other initial that of adult in the conversation:

A: Nina Ana coffee (speaking to Ch)

Ch: ¿cape' too? ("cafe' too?", asking for some for himself)

21) Later, in the same situation:

Ch: me cape' too (while drinking his coffee)

and minutes later, pointing to it:

Ch: coffee.

In another instance English was used in a command:

22) Ch: move! (as he's trying to get past someone)

whereas a Spanish equivalent was used another day in the same type situation:

Ch:!quite! ("quitese!" pushing adult out of his way)

Christopher has shown passive knowledge of his bilingualism in English and Spanish through his comprehension in various speech situations where he responds to or with correct English and/or appropriate Spanish forms to a

previous utterance in Spanish/English, respectively; these forms often being translations as in 23), 24) and 24).

23) In speaking to his grandfather, who is asking him what he had for breakfast:

M: ¿Ya armorzó?

Ch: ti. ("si")

M: ¿Que comió?

Ch: udo ("menudo")

M: ¿menudo?

Ch: aha

M: ¿Y que más?

Ch: naaca ("naranja")

M: bacon?

Ch: naaca (progressively louder)

M: coffee?

Ch: naaca! (now yelling, shows frustration at not being understood by M)

M: ohh, orange!

Ch: aaha. (as nods head)

24) Two adults are speaking to each other (Ch listening): when one comments that a wrapped box which has just been received in the mail must be a box of candy, Ch joins in with the English equivalent of dulces.

A: Es una caja llena de dulces.

Ch: cany, cany! (pointing to wrapped box)

24) In another instance, while in the car and a truck passes by, the same occurs as above:

A: ¡Mira--la troca grande!

and minutes later as another truck goes by:

Ch: ota big truck! ("otra...", pointing to it)

26) and similarly to 24), although in this case Ch responds in Spanish to an English cue word, rather than vice-versa, the subject is listening and then joins the conversation:

A: Ahí vi el carrito del mailman, yo creo ya pasó.

Ch: ¿Cata? ¿Vino cata? ("cartas? Vinieron cartas?")

24), 25) and 26) above may be properly called instances of cross-language reference,[7] in that the subject as a listener decoded in one language and as a speaker proceeded to encode a referent to the previous utterance in another language; i.e., the anaphor in one language had an antecedent in another language. In the situations below cross-linguistic reference is manifested by Christopher in discourse which is specifically directed to him.

27) As Ch is walking by carrying a toy:

A: ¿Qué traes ahí?

Ch: toy

28) Mi: ¿Pepe y Chito en dónde estan?

Ch: wok ("work")

Insofar as Christopher's development of either language in Stage I is concerned, it appears to be progressing normally. His Spanish shows syntactic patterns which are comparable to those found by Gonzalez (1970)[8] in his subjects at age two. Christopher already possesses, for instance, the following patterns.[9]

imperative (verb only)

22) ¡quite!

imperative (verb - direct object)

7) dame eso

(subject) - loc. adv. - estar

(loc. adv.) - estar - (subject)

29) lla tá ("alla esta"; pointing to an object)

(subject) - Intrans. Verb

30) ti cape ("si cabe", trying to put an object in a can)

negation with no

31) no quele ("no quiere", trying to take the lid off a can.)

interrogation with intonation

32) ¿pato pan? (pointing to some bread, asking if it is for the ducks)

interrogation with question word only

33) ¿cal? ("¿cual?")

interrogation with a sentence

34) ¿a one va? ("¿a donde va?", as an adult leaves in a car)

Other patterns found in his speech which are not mentioned by Gonzales for this stage are:

loc. adv. - si, no - verb - direct object

35) qui no a pato, ya si a pato ("aquí no hay patos, allá si hay patos," at the lake)

loc. adv. - Intrans. verb - subject

36) ai va uno ("ahí va uno", as he sees one of two dogs running by)

In addition, Christopher uses at this stage the demonstrative adjective esto and the demonstrative pronoun eso.

7) dame eso.

12) ¿eto creme?

The verb tenses found in Christopher's Spanish appear to follow the same order of development found by Gonzalez; i.e., the present preterite tenses are the first to be acquired. At this stage he uses the present simple tense the most frequently, often utilizing the third person singular -e ending of -er

verbs [v.30), 31)] and the second person formal (usted) ending, as in imperatives [(v.22)].

He has also acquired the preterite form of some verbs, in particular vino from venir, "to come", which he uses most often [v.26)]. The verb hay, "there are", has also been acquired by Christopher [v.35)].

Christopher's utterances in English are at this stage fewer in number and less complex than those which he produces in Spanish; i.e., his English appears to be less developed than his Spanish, still consisting largely of only two-word telegraphic utterances, as opposed to some of his longer Spanish utterances. This is not to imply, however, that his development in English is suffering due to his simultaneous acquisition of Spanish or due to any other reason, as this type of speech is normal for English monolingual children at this stage (v. Brown, 1973).[10]

The features in his English, however, do not correspond to the fourteen grammatical morphemes which were found to be acquired first and with a definite order in Brown's Harvard study. The subject's English, for instance, does not yet show the present progressive tense, which heads Brown's list, but rather the simple present tense:

subject - verb

37) me ance ("me dance", before he starts dancing, thus interpreted as "I want to dance.")

The same verb form is also used in imperatives [v. 4), 5)], and

38) go bye-bye (taking his grandfather by the hand)

in place of the irregular past tense:

39) me get (after he has just been handed a watch which he had been asking for)

Christopher also produces the following question form.

question with intonation

40) me go? (speaking to his mother, who is getting ready to leave)

DISCUSSION - STAGE I

At Stage I Christopher's speech is mostly in Spanish, this language, therefore, being more developed than his English. This is in part due to his having had a Spanish monolingual baby-sitter for approximately eight hours per day, five times a week, for several months prior to the beginning of this stage.

Nonetheless, he uses and comprehends both languages, as evidenced by the data above. His usage of either English or Spanish also includes the corresponding sound system. That is, he keeps both systems apart, depending on the language being used, even in mixed language utterances, and shows no phonological interference in either language. Calo (carro), ten (tren), and pato, for example, are always pronounced [tɛn], [kalɔ], and [pato], all with a non-aspirate [t], [p], [k], and simple vowel sounds. "Coffee", "twain" ("train"), and "piece" are pronounced with aspirate voiceless stops, on the other hand, thus: [kʰɑfi], [tʰwen], [pʰis], and "go" with the diphtong: [gɔʷ].

As concerns his development in either language, it appears to be comparable to that of a monolingual Spanish or English speaking child. Worthy of notice is that the subject is acquiring comparable forms in both languages, these being first acquired in Spanish. The simple present tense and the interrogation with intonation forms, for example, are found in both his languages.

With relation to this one might consider why the present progressive form of the verb is not found in Christopher's English, as the 'ing morpheme is normally the first to be acquired among monolingual English speaking children. The answer to this might be simply that there is no need for it at this stage of the subject's speech development. The larger part of his vocabulary is at this point in Spanish, and verbs used in the simple present tense in this language

take on the function of the -ing verb form in English (i.e., the simple present tense in Spanish serves the functions of both the simple present and present progressive tenses in English).

Christopher's mixed language utterances appear to be fairly predictable here. That is, the code-switched items are either "me"[11] or ota (otra)in a large percentage of his speech, both words functioning in a pivotal fashion.

Notice, however, that in noun phrases such as 15) ota boot and 16) oto piece, there is gender agreement which corresponds to the gender of the Spanish equivalent. The nouns (la) bota and (el) pedazo are feminine and masculine, respectively, and these same genders are assigned to the English nouns, as is evident by the corresponding ota and oto (fem. and masc.) forms which modify them. Thus, these forms show that the subject has internalized into his grammar(s)? certain morphological features of Spanish, namely gender assignment and gender agreement, and furthermore, that he is able to apply these rules cross-linguistically, thereby not violating these language specific rules even in mixed language utterances.

Another example which is an indication of grammatical competence in either language is seen in 25). In this case there is not only correct gender agreement (as per the fem. troca), but also correct adjective - noun word order in English, whereas the subject has just previously heard the opposite, noun - adjective, order in the Spanish equivalent.

Evidence of his acquisition of bilingualism is thus seen at this stage through his comprehension and use of speech in either language, including his ability to use lexical items referring to the same object in either English or Spanish and to use them with the appropriate morphological features even in mixed language utterances; and through a development of two phonological systems each of which is appropriately used, given the language spoken at the time.

STAGE II

Data from Christopher's speech at Stage II (recorded at 2:4:0, 2:5:0 and 2:6:2) show that his English, Spanish and mixed language utterances are now longer and have acquired several grammatical features, to be discussed below, which are not present in State I.

41) go ousay play ball ("go outside play ball", taking A by hand)

42) me mell pepper ("me smell pepper", trying to smell some black pepper which his mother is showing him)

43) mama wead books ("mama read books", asking his mother to read to him)

44) casa mía no (in the car, as sees they're going in a direction towards his home)

45) no se (in response to a question)

46) muchos niños (as sees children walking home from school)

47) no tá ocuro ("no esta obscuro", after A has just told him it is too dark to go outside)

48) mama bing me caane ("mama bring me carne", speaking to A while his mother, L, is serving him some meat)

49) Hukiy quita my coke ("Huskiy quita my coke", handing A his coke; telling her the dog, Huskiy, will take it away)

50) me no veo, me entes ("me no veo, me lentes", while watching TV)

The subject has thus continued to use two languages in his speech; his vocabulary in either language also having increased so that he has now acquired alternate English/Spanish forms for a larger number of words, and uses them as such in discourse:[12]

At 2:1:0 he used only the Spanish feo for "ugly":

51a) eto no peo, eto si ("esto no feo, esto si", looking at pictures of different animals)

while at 2:6:2 he also uses the English form:

51b) ugly! ugly! put righ ere ("...put right here", referring to some notes which A is writing down)

At 2:10 he had only dos for "two" in his vocabulary:

52a) A: ¿Cuántos años tiene?

Ch: dos

but at 2:5:0 looking at two ducks in a picture book:

A: ¿Cuántos son?

Ch: uno, two. (as he points at each one)

and later in the same situation, looking at a picture of two chicks:

52c) Ch: dos chicks.

Bilingual referentiality in Christopher's speech often occurs even within the same speech event.

53) At the lake, waiting for ducks to swim by:

Ch: ¿Ita hay patos? ("ahorita hay patos?")

M: Ahorita. Vamos a esperar.

Ch: ¿ita sale patos? ¿ita sale ducks? ("ahorita...")

Cross linguistic reference also continues as part of Christopher's developing bilingualism:

54) M: ¿Qué son?

Ch: big efants ("big elephants")

55) M: I like this book. Will you give it to me?

Ch: No! No! Me quele 2x ("...me quiere")

56) A: ¿y sus books?

Ch: me casa.

The subject's Spanish has acquired some new features by this time:

(nO) - estar - adjective /

47) no tá ocuro

the conjunction y in N - y - N

57) sopa y caane ("...y carne", when asked what he is eating)

quantifier - noun - (plural with -s)

46) muchos niños

noun - stressed possessive

44) casa mía no

He continues to use the present and preterite tenses most often:

53) ... ita sale patos ...

58) wags tiyó ("Rags tiró", telling L that the dog, Rags just threw him down)

and in addition has acquired the first person, singular form for the verb ver,

50) me no veo, me entes

which is used where the infinitive formerly appeared,

10) me ver

Christopher's English has developed to a far greater extent during Stage II than Stage I. His structures in this language have gotten longer and now exhibit several grammatical morphemes, some of which correspond to Brown's list of fourteen morphemes.

These include:

The 1st person sing. PRO form "I" in the structure subject - verb - direct object

59) I want coke

the 3rd person sing. PRO form "it"

60) leave it down. (asking A to leave recorder on the ground) the possessive adjective "my" in certain noun phrases

61) my tun ("my turn", playing a game)

interrogation with the question word "where"

62) where ducks?

Among those mentioned in Brown are:

the 'ing morpheme in the pres. prog. tense

63) no woking ("no working", pointing to a toy which is not working right)

the -s plural

43) mama wead books

the copula is

64) where is it?

The subject's mixed language patterns are no longer just basically words serving a pivot function but serve nominal verbal and adjectival functions as well (the code-switched items in the data below are considered to be those words in Spanish, this based on the observation that he was speaking predominantly in English at the time when they were produced):

direct object

48) mama bing me caane

verb

49) Hukiy quita my coke

65) righ here hay ducks? ("right ...", at the lake)

(numeral and quantifier)

66) o.k., me uno cany ("..candy", after he agrees to eat only one piece of candy)

67) mucho cany ("mucho candy", asking for lots of candy)

DISCUSSION - STAGE II

Most of Christopher's language development in this stage has been in English. This comes as no surprise, for at the age of approximately 2:3:0 (i.e., towards the end of Stage I and during Stage II) he was enrolled into a day care center, thus he heard and spoke mostly (possibly all) English for eight hours a day during this time. His English, therefore, developed at a

faster rate at this stage, where, as seen through the acquisition of certain grammatical morphemes, it appears to be following an order of development not unlike that of English monolingual children.

His Spanish, has nevertheless, not been stifled at this stage. Along with an increase in vocabulary, Christopher has also developed some new morphological features in this language while at the same time maintaining those patterns which were apparent in Stage I (owing, apparently, at this stage to the use of Spanish at home).

Thus, he is still on the way towards becoming bilingual, as evidenced by his comprehension of speech in both Spanish and English as well as by his use of these two languages.

The mixed language utterances also comprise evidence as to his developing bilingualism. The verbal switches, in particular, show knowledge of two linguistic systems and an ability to combine them without any hesitation whatsoever into a smoothly flowing, well formed utterance; i.e., one which, despite its use of both English and Spanish is not ungrammatical in the sense that it violates any rules thereof.[13]

Although more will be said about this below, with relation to Stage III, the basic rule which is pertinent at this stage is simply that of correct usage of lexical items in an L_2 when speaking in an L_1, as well as correct word order. In 49) Hukiy quita my coke, for example, the verb quita from quitar, "to take away" is semantically and syntactically a perfect filler in the verbal slot of that otherwise English utterance; thus forming the sentence "Huskiy takes away my coke" ("takes", rather than "is taking", given the context above).

Likewise occurs in 65) righ(t) here hay ducks? where hay, which is

syntactically correctly inserted into the sentence, has the meaning "there are" (rather than "there is" given the plural noun following), thus forming with the corresponding intonation the question "right here there are ducks?".

Worthy of notice also is the agreement in number in 65). From the time Christopher acquired the plural -s morpheme in Spanish during this stage, he has always used hay with a plural noun complement (the singular form perhaps being non-existent for him at this point) in his Spanish [v53)]; as such he also uses the plural "ducks" in English, with Spanish hay as in 65) above. Whether this is the result of a translation process of two co-occurring items (i.e., hay - patos), or simply a direct verbal mediation from the given speech context to hay plus "ducks" is impossible to say at this point.

The fact remains, however, that a well formed utterance is produced in that there is number agreement between the Spanish verb (although inherently in the case of the verb since it never changes in form) and the English noun, as well as correct word order.

Note also the number agreement in 66)...uno cany and 52c) dos chicks, where in the former the noun is singular to agree with uno and in the latter the noun is pluralized to agree with the semantic plurality of the number dos or "two". These examples are another indication of his developing bilingualism in that they are well formed also, despite lexical insertions from both English and Spanish.

The preceding thus shows that the subject has internalized sufficient knowledge of either language to be able to manipulate and combine items from both of these languages into a grammatical whole.

This whole (which is comprised of two languages), furthermore, is perhaps essentially being processed at this stage of his language development in accordance with basic semantic relations in the form of,e.g., agent - action -

patient, or subject - verb - object, which yields correct word order cross linguistically (and thus might even be a type of cross-linguistic grammar), i.e., regardless of the languages with which he fills in the various slots. Evidence for this might also consist in that there are no redundant, or duplicated, forms in the subject's mixed language utterances, as e.g., *Huckiy quita my coke mia or *where está is it?

STAGE III

The last stage recorded of Christopher's speech continues to show a faster rate of development in English; in fact, all significant linguistic progress made in this stage (with the exception of an increase in vocabulary in either language) occurs in English. Data from this stage includes:

68) I don know (in response to a question, "I don't know")

69) me wan go wit you ("me want go with you", taking A by hand)

70) Wha you writing? ("What...?", asking A who is taking down some notes while talking to him)

71) you leave it down (asking A to put recorder on the ground)

72) ¿cal sia? ("cuál silla?,"after L warns him he is going to fall off "that" chair)

73) no se cal ("...cual", when asked which book he would like to see)

74) qui tá bolsá ("aquí está bolsa", when asked to put his hat in a bag, as he brings one to A)

75) no hay tuenos ("...truenos", looking outside, after rain and thunder have stopped)

76) Ahora martes coming garbage truck (talking to L)

77) No hay ducks, pura water (looking at a picture in a book)

78) no tie my cinta (as L is trying to tie his shoelace)

79) Ahora no can go zoo 'cause raining (looking out during rainstorm)

As in the past, bilingual referentiality is used in Christopher's speech in this stage:

80a) give me my book (talking to A, who has his book)

80b) me read my libo ("...libro", as looking at a book)

81a) me wan more milk ("me want...", talking to L)

81b) I wan leche ("I want...", talking to L

82a) play ball (describing a picture in a book)

82b) they're playing pelota (minutes later, same context as above)

83a) ¡calo! ("carro", pointing to a car)

83b) you wan go mama car? ("you want...", talking to A)

Spanish/English equivalents have also been acquired for adverbs,

84a) I wan más sandia (talking to L, who does not respond)

84b) I wan more sandia (minutes later, again to L)

85a) me uno only, oto pocke ("...otro pocket", as he puts the other piece of candy in his pocket)

85b) no hay ducks, pura water [v. 77) above]

and phrases

86a) no se (in response to questions)

86b) I don know ("...don't...", in response to questions)

Instances where Christopher's passive knowledge of Spanish (which exceeds his active use of it, in this stage, particularly) is manifested are:

87) As A is dressing Ch in the morning:

Ch: ¡me no camisa!

A: traigame sus calcetines (no gestures)

CH: (proceeds to get them from inside a drawer and gives them to A)

88) As Ch's grandmother is talking to L, Ch listening:

M: ¡Mire que manos tan grandotas!

Ch: No! Little!

His comprehension of Spanish is also observed in the following examples of cross language reference, where the subject consistently responds to predominantly Spanish discourse in English:

89) L: ¿A dónde van los niños?

Ch: school

90) L: Cristóbal, ya recoga sus toys.

Ch: What for?

L: Paraque ya se vaya a acostar.

Ch: no go sleep.

91) A: ¿Qué va a comprar en la store?

Ch: cake

A: ¿Y que hizo en la school ahora?

Ch: play.

92) A: ¿Que hizo ahora con grandpa usted?

Ch: nothing.

A: nothing? Sii--no fueron en la troca? ¿A donde fueron?

Ch: fuco ("Woolco")

A: ¿ a traer focos? (pause) (A did not understand previous utterance, at first)

ahh--a Woolco fueron?

Ch: fix car Ch responds to A's first utterance)

As mentioned earlier, the subject appears to be only maintaining his Spanish at this point, in that his utterances are comparable to those of Stages I and II. He has, nevertheless, acquired the -es plural form as with the question word cuál:

93) L: Deme las booties.

Ch: ¿cales? ("cuales?")

and, in addition, now produces it with a noun referent:

72) ¿cal sia?

Christopher's English has developed quite fast during this stage. He has acquired the following new features in this language.

the PRO forms "you" and "she"

71) you leave it down

94) she crying (watching a singer on television)

the preposition "with"

69) me wan go wit you

the demonstrative adjectives in interrogatives:

95a)what those?

95b)what this

95c)what that?

and in declaratives.

95d)this orsie ("this horsie", pointing to a horse in a book)

"me" as indirect object and direct object (respectively)

80) give me my book

96) Daay take me buy boat ("daddy...", talking to A)

(Notice that the above functions for "me" coexist with that of a subject pronoun form, as in 69), which, however is used much less frequently than in stages I and II.)

the possessive adjectives "her" and "your"

97) Look! Her eyes got black here (pointing to his eyelid: while watching a singer on television)

98) I like you tennis! (pointing to A's tennis shoes)

the modal "can"

99) me can, Ana, me can? (asking for permission to do something)

"want" with (infinitive) direct object

100) I wan hear dat ("I want (to) hear that")

the negative forms "not" and "n't"[14]

101a) Why daay not coming? ("why daddy...")

101b) Me can't cut bananas; me make mess.

the forms "don't" and "didn't"

68) I don know

102) I didn get dressed ("I didn't..."

Among the forms mentioned in Brown's list of fourteen morphemes are:

the irregular past tense of verbs

(103) me fell down!

97) ... Her eyes got black here.

the contracted auxiliar -re

82b) they're playing pelota

The subject continues to mix languages to a large extent in his speech. Most of the code-switched items, however, are now noun phrases; switched verb phrases are less frequent than in Stage II. New patterns include:

a noun preceded by a demonstrative adjective

104) this lampara (pointing to a lamp)

a noun preceded by a possessive adjective

105) my rodilla (when asked where he got hurt)

an adverb (phrase) preceding a sentence

79) Ahora no can go zoo 'cause raining

76) Ahora martes coming garbage truck

DISCUSSION - STAGE III

Most of Christopher's speech is in English during this stage, where during the first month (i.e., at 2:7:0) he is still attending the day care center. This undoubtedly had a great impact not only aas concerns his development of English, but also the great speed with which he acquired it and the increase in his verbalization, in general.

His Spanish has been maintained at home and with the little contact he has with his all-Spanish speaking grandparents. The major influence, however, is undoubtedly the language of the home; i.e., the fact that he has maintained (and developed even to a small degree in II and III) his Spanish can be attributed only to the code-switching between Spanish and English which he is constantly exposed to, not only in his home but also at the home of his maternal grandparents.

This has led, of course, also to his using and developing his mixed language utterances, in that he continues to use new and varied code-switching patterns in his speech. Of most interest in this stage, as concerns Christopher's bilingual discourse, are the Spanish items in 76) and 79), for these utterances, despite their Spanish-English composition, reflect the syntax of Spanish.

Spanish word order is twice seen in 76); where the temporal adverb phrase ahora martes is placed in sentence initial position and where the subject "garbage truck" is placed after the verb "coming". This word order is common in Spanish; however, the post-positioned subject is ungrammatical in English and the pre-posed adverb phrase is at best peculiar in the same language:

106a) Ahora, martes viene la troca de la basura.

106b) La troca de la basura viene ahora, martes.

106c) *Ahora, martes, la troca de la basura viene.

107a) *Today, Tuesday, is coming the garbage truck.

107b) *Today, Tuesday, the garbage truck is coming.

107c) *Is coming the garbage truck, today, Tuesday.

107d) The garbage truck is coming today, Tuesday.

One might be tempted to say, then, that 76) is not a well formed utterance and that "...coming garbage truck" shows syntactic interference from the Spanish, as in 106a), which in English results in an ungrammatical sentence such as 107a). The fact that 76), however, is a mixed language utterance and must, therefore, obey the constraints of either English or Spanish if it is to be well formed, sheds new light on the matter. One such constraint which appears to operate in Spanish in sentences like 106a) is that if an adverb phrase is in initial position in a sentence containing an intransitive verb with nothing following it, the subject noun phrase, if expressed, must follow the verb. Because ahora martes is in initial position in this type structure, therefore, the subject must be postponed. This constraint is thus being adhered to in 76) and as such one can say that it is actually a well formed utterance which is in agreement with certain syntactic constraints of Spanish.

Because the verb is expressed in English, however, its postponed-subject construction appears to be ungrammatical. In order to accurately judge the grammaticality of 76), as well as any utterance similar to it, therefore, one must look at the totality of the utterance, consider the added constraints brought upon it as a result of the code-switching (i.e., those of two languages rather than one), and evaluate it in light of the fact that where constraints differ, or are contradictory, concessions must be made to those of one or the other language. The results of this must be looked at, not as a partially ungrammatical sentence, but as a sentence which follows the rules of code-switching; i.e., a type of code-switching grammar.

Nonetheless, of importance here is that the subject shows a knowledge of syntactic constraints in Spanish, as evidenced in 76), and an ability to consider and incorporate these into his mixed language utterances. He, furthermore, had no choice but to follow the constraints of Spanish, rather than English, upon production of the first two words, ahora martes, which because of its initial sentence position, determined that the syntax of the remainder of the utterance could only be that of Spanish.

Why the verb was produced in English now becomes of marginal concern to the central question of bilingual linguistic competence. The answer to this is most likely simply a matter of vocabulary; the subject does not possess the Spanish counter-part of "garbage truck" nor does he possess the present tense form of the verb venir "to come" [note that this verb has only been produced in its preterite form, v. 26)].

Of interest in 79) is that the underlying syntax, like that of 76) is that of Spanish. The one difference is that there are no verb phrase constraints which are in direct opposition to each other, as in the former utterance.

As in 76), the adverb is preposed; however, the subject is not expressed, thus eliminating the problem found in that sentence. The fact that it is not expressed also indicates that 79) is syntactically a Spanish sentence, as expression of the subject is optional in this language, person and number being shown by the inflection on the verb:

108a) Ahora no puedo ir al zoológico porque está lloviendo.
llueve

The initial sentence position of the adverb is itself also, generally, a reflection of Spanish syntax, as discussed above. A third indication of Spanish syntax is that the negative no is used rather than English "can't" (cf. 101b),

as would be the case were the sentence entirely in Spanish (v. 108a).

This analysis of 79), therefore, shows that it is syntactically a Spanish utterance. One cannot, as a result, claim that it is an English sentence which shows interference from Spanish, as the only basis for this claim would be simply that the greater part of the utterance is expressed in English. However, as in the case above, the use of lexical items in English was most likely simply a result of not knowing the Spanish equivalents of these words. In sum, 79) shows linguistic competence in Spanish on the part of the subject.

CONCLUSIONS

The primary purpose of this study, as stated earlier in this paper, was to explore the language development of a child who is being raised in a code-switching type of speech environment and to determine what relation code-switching might have to the acquisition of bilingualism. This was carried out by analyzing the subject's speech at three different stages of its development during a nine-month period of time. Conclusions to be drawn from the discussions of the various analyses are the following.

1. The subject's language development has been strongly affected as a result of the varying (Spanish/English) linguistic environments which he has been submerged into. This was evident within a nine-month period, where he went from predominantly Spanish speech to predominantly English speech.
2. The subject has acquired knowledge of two languages, as evidenced not only by his comprehension of English and Spanish, but by his use of both these languages as well. Evidence for this also rests on the appropriate use of two phonological systems.
3. The child's developing bilingualism has led to an alternate use of two languages in his speech; i.e., to his code-switching between and within utterances.

4. The subject's mixed language utterances are well formed. Syntactic constraints of Spanish and/or English are adhered to in code-switched utterances.

5. The child's code-switching patterns often seem to reflect only language preferences; i.e., in the cases where he possesses lexical equivalents in either language. In other cases they appear to be the result of not knowing the Spanish and/or the English counterparts of certain items. His code-switching, therefore, does not at this age serve any social functions, but rather linguistic ones.

6. The child does not yet seem to be aware of the concept of "language" or that he possesses two linguistic systems. His use of certain items in either language (i.e., lexical equivalents) however, has apparently made him aware of the fact that there are different forms of expression for the same concept.

7. His development in either language is comparable to that of monolingual English or Spanish speaking children, as determined through Gonzalez (1970) and Brown (1973). Although his active use of Spanish showed a slight lag in development in Stage II, he has, nonetheless, maintained it up to that point. Furthermore, there is reason to believe that in the following stage, concomitant with a change in his linguistic environment from the day care center back to his home, his development of Spanish will once again gain foothold and progress at a faster rate, as was the case prior to Stage II.

In sum, code-switching appears not to be detrimental to the development of bilingualism, but on the contrary, seems to be one approach to the simultaneous acquisition and maintenance of two languages.

On the basis of the above, therefore, the question posed earlier, concerning the relationship between code-switching and bilingual language acquisition, can now be answered in a positive way. In light of the findings presented

herein, code-switching does not hinder the development of bilingualism but rather may enhance it.

This is particularly the case where, as in the Southwest of the United States, separation of both languages is nearly impossible (due to the very nature of the bilingual/bicultural atmosphere existing there), and where code-switching is the norm rather than the exception. In situations such as this, code-switching may be the only viable means of developing and maintaining bilingualism (in particular with regards to Spanish), from birth and up to the age of schooling. Once the child does get to school (provided he or she is able to enroll in bilingual bicultural education classes) his bilingualism will be further developed in all four skills in each language (i.e., in reading, writing, understanding, and speaking), and any linguistic "gaps" which he might have in either Spanish or English will be filled.

With relation to this, because code-switching is a way of speaking at home for many children and because it can be, as seen above, a method for use and maintenance of two languages in natural settings, it should be allowed in the classroom. This is not to advocate its use as the primary means of communication, in particular when the aim is to further develop skills in each language so that the code-switching bilingual also has two other forms of communication available to him (i.e., all Spanish and all English), but to indicate that a negative attitude to it is also a rejection and humiliation of the child's home environment, his culture, and therefore, his whole being, all of which is defeating to the primary purpose of bilingual/bicultural education which is to instill a positive attitude in the child to his language and culture. For these reasons the use of code-switching, because it is an integral part of the Mexican-American child's culture, should therefore be accepted in the classroom.

Thus, as a result of this investigation, there seems to be no evidence to substantiate the claim that code-switching leads to any kind of "confusion" or "stalemate" in a child's language development. Furthermore, it disclaims the attitude that code-switching, as it exists in the Southwestern United States, is the result of the speaker not knowing either English or Spanish; for as seen above, code-switched utterances even in the speech of a two year old child, manifest linguistic competence in both these languages.

One question remains to be discussed as concerns the investigation presented herein. How does Christopher's language development compare with that of a child who has been raised in an environment where the separateness of the languages is maintained?

One available study which has some bearing on this question is that of Padilla and Liebman, mentioned earlier in this paper. Padilla and Liebman studied the language development of three subjects -- aged two years, two months (2:2), two years, one month (2:1), and one year, five months (1:5) at the onset of the investigation. The linguistic environment of these subjects all involved, to some extent, the use of both Spanish and English in the home.[16] Their analysis was also based on recordings of spontaneous speech by the children in natural settings. The results of this study are pertinent here in that several of the characteristics found in the speech of these children were found also to occur in Christopher's speech. These were as follows (each one not necessarily occurring in all three subjects' speech).

1. The plural -s appeared in Spanish first, then in English.
2. The first appearance of the negative no occurred in Spanish and was placed in pre-sentence position (i.e., no - sentence).
3. After no, the second negative to be acquired in one subject's speech was "can't," which, however, did not appear in mixed language utterances (cf. 79).

4. Imperatives and interrogation with intonation were among the earliest forms in the subject's speech, these having occurred at the one word stage.

5. The main function of estar when it first appeared was to denote location.

6. Comparable forms, including equivalent lexical items, were developed in either language.

7. Code-switching developed in the subjects' speech and was, furthermore, done appropriately in that correct word order was always preserved, and there was no redundancy of forms.

8. Separateness of the languages was maintained at the phonological level.

9. The development of Spanish and English in all the subjects was at a rate comparable to that of monolinguals in either language.

The fact that several similarities were found in the results of these two studies is of theoretical importance. This leads to the possibility that perhaps the process of bilingual language acquisition is the same, or at least highly similar, in any case; i.e., regardless of whether the languages are kept apart or not (in this case, considering that they are kept apart at least to the degree that they are not mixed within utterances, as regarding the Padilla and Liebman study). This process may involve certain operating rules which allow children to filter only certain items from their linguistic input, whatever its shape, and build a (initially a cross-linguistic?) grammar in such a way that they proceed through the same stages in their acquisition of bilingualism; i.e., the process being an orderly and definitive one. These questions, nevertheless, can only be answered in the future, pending other similar studies which will surely shed further light on the findings presented in this paper.

FOOTNOTES

1. Although scholars have not agreed on what exactly defines bilingualism, this term will be used herein to indicate knowledge and use of two languages.

2. Latest figures [Agenda 7(2):5] indicate that the population of Hispanic origin in the U. S. now is over 15 million people.

3. This observation is also in accord with Gonzalez who stated that "language begins for the Spanish-speaking Mexican-American child at the age of around two years." (p. 9)

4. The forms mixed language and code-switched (or mixing languages and code-switching) are used synonymously here. Although the linguistic alternations found in the subject's bilingual discourse may call for the differential use of these two terms, this topic will not be dealt with here due to the lack of space.

5. For a discussion of pivot grammar, see Brown (1973). Note that the writer is not here saying that the subject possessed a pivot grammar but rather that he merely used certain words in a pivot-like fashion.

6. This has been previously discussed by the writer in an unpublished paper entitled "Code-Switching among Spanish-English Bilinguals: a Descriptive Study."

7. For a discussion of cross language reference in bilingual discourse, see Pfaff (1976). Furthermore, except for those utterances listed under cross-linguistic reference, the remainder of the subject's speech data presented herein (where preceded by other discourse from an adult) occurs in basically the same language as that which was predominant in the previous utterance. That is, English/Spanish in response to English/Spanish, respectively.

8. Gonzalez (1970) will be used as a reference for purposes of comparison of data in the acquisition of Spanish. The same format found in his study will also be used here in describing syntactic patterns, parenthesis indicating an item is optional.

9. A particular item or syntactic pattern is said to be part of Christopher's speech if he has been heard to produce it at least three times.

10. Brown (1973) will be used as the reference from the acquisition of English. The approach herein will differ somewhat from Brown's analysis, however, in that it will focus more on acquisition of syntactic structures rather than on specific grammatical morphemes.

11. A problem which arose with the word "me" was whether to interpret it as such or as the Spanish possessive adjective mi. This problem, furthermore, could not always be resolved from the discourse context, as in e.g., A: y tus books? Ch: [mi] cama. It was decided, however, that Christopher did not yet possess the Spanish mi but rather "me," used with the interpretation given above, as in 11) p. 4. It was highly unlikely that the subject would acquire a possessive adjective at a time when his speech still consisted largely of

telegraphic utterances. Furthermore, "me" provided a more sensible interpretation in the majority of cases where this sound sequence was used.

12. Although it is recognized that knowledge of equivalent lexical items in two languages does not by itself constitute bilingualism, it is nevertheless an essential part of it. The other point to be made in these examples, however, is the subject's indiscriminate, spontaneous, and natural use of these items in either language, which shows his linguistic self-assurance in his own developing bilingualism; i.e., in his proper use of both forms in discourse.

13. "Ungrammatical" used here, of course, as pertains to child language at this stage of language development. It is expected that the utterances referred to here would be ungrammatical by adult standards, as they omit, e.g., functor words.

14. Although the negative no appears in intermediate stages in the acquisition of negation in both Spanish and English, in this case study "not" or "n't" is taken to be the first and only expression of negation in English. No, since it first appeared in Stage I has always been produced in Spanish ([no]) rather than English ([no^{w}]). This is true even in Stage III, where it is produced in, otherwise, all English sentences. For this reason it is considered to be the Spanish negative morpheme. Why he produces [no] rather than [no^{w}] might be simply a matter of preference, or possibly, since he has never produced the latter, the subject might not see a need to distinguish between and/or use two forms which are so phonologically similar (as opposed to other English/Spanish counterparts) and which, furthermore, serve the same purpose.

15. Note that had the entire sentence been in English, in all probability Christopher would have followed the rules for English and preposed the subject (cf. 70) p. 20).

16. Unfortunately, the author does not clearly explain what type of language environment these children were raised in. The only generalization made with relation to this was that "...Spanish and English were used with consistency" (p. 39) in all three cases, thus not specifically making reference to the use of intra or intersentential code-switching in these homes. For the purpose herein, therefore, it will be assumed that code-switching of the type found among members of Christopher's family (i.e., code-switching between and within utterances) did not occur in the case of these three families, and as such that the languages were kept apart, as e.g., by relating a specific language to each parent or by switching to Spanish/English only in response to a change in the speech situation, or to a different speech event.

REFERENCES

Brown, Roger.
1973. A First Language: The Early Stages. Cambridge, Mass: Harvard University Press.

Burling, Robbins.
1959. Language Development of a Garo and English-speaking Child. Word 15. 45-68.

Fantini, Alvino.
1974. Language Acquisition of a Bilingual Child: A Sociolinguistic Perspective. Putney, Vermont: The Experiment Press.

Gonzalez, Gustavo.
1970. The Acquisition of Spanish Grammar by Native Spanish Speakers. Unpublished PhD Dissertation. University of Texas.

Leopol, Werner E.
1939-49. Speech Development of a Bilingual Child: A Linguist's Record. Evanston, Ill.: Northwestern University Press.

McClure, Erica.
1977. Aspects of Code-Switching in the Discourse of Bilingual Mexican-American Children. Paper presented at Georgetown University Roundtable.

McClure, Erica and James Wentz.
1976. Code-Switching in Children's Narratives. Paper presented at the Mid-American Linguistics Conference, University of Kansas.

McClure, Erica and James Wentz.
1975. Functions of Code-Switching Among Mexican-American Children. Chicago Linguistic Society Parasession on Functionalism. pp. 421-32.

Padilla, A. M. and Ellen Liebman.
1975. Language Acquisition in the Bilingual Child. The Bilingual Review 1.34 - 55.

Pfaff, Carol W.
1976. Cross-Language Reference in Bilingual Discourse. Paper presented at Fifth Conference on New Ways of Analyzing Variation. Georgetown University.